

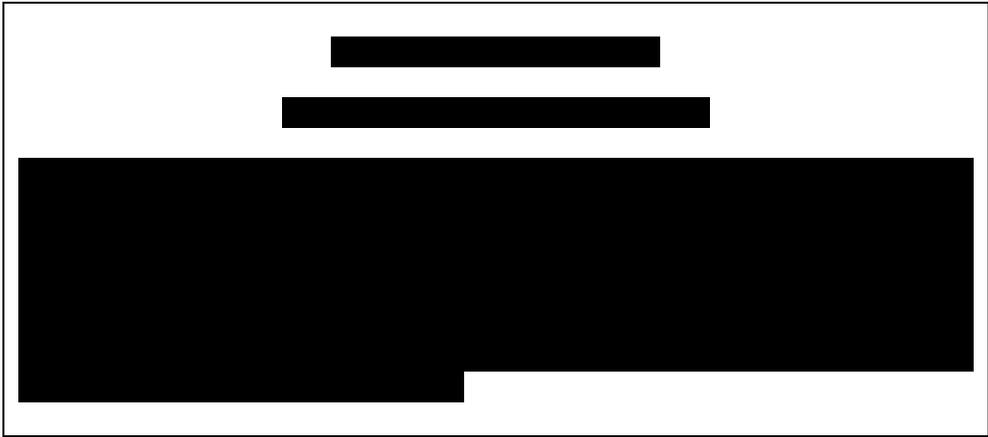
UNIVERSITY OF ARIZONA
SAHRA CENTER
888 N. Euclid Ave.
Tucson, AZ 85721

National Science Foundation Award Numbers
EAR-9876800

Financial Schedules and
Independent Auditors' Reports

For the Period January 1, 2000 to September 30, 2004

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**UNIVERSITY OF ARIZONA
SAHRA Center**

Table of Contents

	<u>Page</u>
Executive Summary:	
Background.....	1
Audit Objectives, Scope and Methodology.....	1
Summary of Audit Results	2
Summary of Recommendations	4
Summary of Auditee’s Response to Audit Results.....	4
Follow-up of Prior Audit Findings.....	4
Exit Conference	4
Findings and Recommendations:	
Report on Compliance and Other Matters and on Internal Control over Financial Reporting Based on an Audit Performed in Accordance with <i>Government Auditing Standards</i>	6
Financial Schedules and Supplemental Information:	
Independent Auditors’ Report on Financial Schedules	16
Schedule A - Schedule of Award Costs (Award No. EAR-9876800).....	18
Schedule B - Schedule of Questioned Costs (Award No. EAR-9876800)	19
Schedule C - Summary Schedules of Awards Audited and Audit Results.....	29
Notes to Financial Schedules	30
Appendix - Awardee’s Comments to Report	

EXECUTIVE SUMMARY

National Science Foundation
Office of Inspector General
4201 Wilson Boulevard
Arlington, Virginia 22230

BACKGROUND

The University of Arizona (University) is a public university located in Tucson, Arizona. The University was established in 1885 and is part of Arizona's state-operated educational institutions. The University follows the Federal administrative requirements contained in OMB Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations* and the cost principles specified in Office of Management and Budget (OMB) Circular A-21, *Cost Principles for Educational Institutions*. The National Science Foundation (NSF), under the Science and Technology Centers Program, awarded the University a cooperative agreement in the amount of \$16,992,249 during the period of January 1, 2000 through December 31, 2004. As a part of the award, the University was required to cost share in the amount of \$6,691,853 over the five year period. The audit period for this report is January 1, 2000 through September 30, 2004.

Award EAR-9876800 – Sustainability of semi-Arid Hydrology and Riparian Areas (SAHRA)

The NSF award provides the University financial support to operate the Science and Technology Center for the Sustainability of Water Resources in Semi-Arid Regions (SAHRA Center). The Center's overall mission is to nurture effective mechanisms for rapidly moving the state of scientific knowledge into widespread use by the public and private agencies responsible for managing the vulnerable water resources in semi-arid regions. Through the combination of research and education of students, the Center is building an interdisciplinary perspective and technological skills within professionals practicing water resources management.

The NSF award is administered and operated by personnel at the SAHRA Center located on the campus of the University. The Center operates within the University's Department of Hydrology, which ultimately is within the School of Engineering.

AUDIT OBJECTIVES, SCOPE & METHODOLOGY

At the request of the NSF Office of Inspector General (OIG), Conrad and Associates, L.L.P., conducted an audit of NSF cooperative agreement EAR-9876800 awarded to the University of Arizona. Our audit objectives were to:

1. Determine whether the Schedule(s) of Award Costs of the University of Arizona presents fairly, in all material respects, the costs claimed on the Federal Cash Transactions Reports (FCTR) – Federal Share of Net Disbursements in conformity with NSF OIG's Financial Audit Guide, and terms and conditions of the NSF award.
2. Identify matters concerning instances of noncompliance with laws, regulations, and the provisions of the award agreement pertaining to the NSF awards and weaknesses in the University of Arizona's internal control over financial reporting that could have a direct and material effect on the Schedule of Award Costs and the University of Arizona's ability to properly administer, account for, and monitor its NSF awards.

To accomplish the objectives of the audit, we:

- Prepared a survey and internal control audit-planning document for OIG review and approval. The document included the proposed audit program and sampling methodology for performing the audit survey, gaining an understanding of the grantee’s policies and procedures and financial systems for administering its NSF awards, identifying risks in the grantee’s operations for effectively administering its NSF awards, and testing the grantee’s significant internal controls to determine whether those controls are operating effectively to mitigate the identified risk.
- Prepared a survey and internal control assessment report for OIG review and approval. The assessment report included a summary of the results of the on-site audit survey and testing of significant internal controls.
- Prepared a substantive audit testing planning document for OIG review and approval. The document included the proposed audit program including sections on tests of compliance with applicable laws and regulations, and substantive testing procedures to determine whether costs charged to the NSF award(s) by the awardee are allowable, allocable, and reasonable in accordance with the applicable Federal cost principles and award terms and conditions.
- Prepared Notification of Findings (NOFs) based on the results of audit fieldwork. The NOFs included detailed information on each finding identified.

Our audit was conducted in accordance with auditing standards generally accepted in the United States of America, *Government Auditing Standards* issued by the Comptroller General of the United States of America. Our audit of the aforementioned awards used non-statistical sampling to test the costs claimed by the University and to test for compliance with Federal and NSF award requirements.

SUMMARY OF AUDIT RESULTS

Our audit found that the University was generally able to account for NSF funds. However, we identified a significant weakness in subawardee oversight that resulted in \$354,938 of questioned costs. We also identified other areas in which the Center can improve including electronic payment approvals, consulting costs approvals, and payroll expenses documentation. We performed an audit on the financial reports submitted to the NSF as well as cost sharing provided by the University on the NSF award. These costs are shown in Schedule A of this report and are summarized as follows:

<u>NSF Award No.</u>	<u>Award Budget</u>	<u>Claimed Costs</u>	<u>Costs Selected for Review</u>	<u>Questioned Costs</u>
EAR – 9876800	\$ 16,992,249	14,169,314	6,993,072	52,737
Cost Sharing	<u>6,691,853</u>	<u>6,658,098</u>	<u>2,544,856</u>	<u>335,187</u>
Total	<u>\$ 23,684,102</u>	<u>20,827,412</u>	<u>9,537,928</u>	<u>387,924</u>

Our audit of this award disclosed questioned costs of \$387,924 in the following cost categories: salaries and wages, fringe benefits, publication, consulting, subawards, indirect, and cost sharing. Questioned costs are (1) costs for which there is documentation that the recorded costs were expended in violation of the law, regulations, or specific conditions of the award; (2) costs that require additional support by the awardee; or (3) costs that require interpretation of allowability by the National Science Foundation.

We noted compliance deficiencies and internal control weaknesses that could have a significant impact on the University's ability to record, process, summarize, and report financial data, and effectively and efficiently administer the funds in a manner that is consistent with NSF and other Federal laws and regulations. If the University fails to address these compliance and internal control weaknesses, similar problems may occur on other existing and/or future NSF awards granted to the University.

The following is a brief description of the compliance and internal control findings that resulted from our audit. For a complete discussion of these findings, refer to the Report on Compliance and Other Matters and Internal Controls over Financial Reporting Based on an Audit Performed in Accordance with Government Auditing Standards.

Inadequate Subawardee Monitoring

The University needs to establish a risk-based monitoring program to ensure that costs invoiced or claimed and certified as cost sharing by the subawardees of the SAHRA Center are accurate, allowable, allocable, and properly documented per NSF regulations and OMB Circulars. Approximately \$1 million, or 15 percent of the cost sharing expenditures claimed and certified by the University was contributed from subawardees. Additionally, subaward costs that NSF funded totaled \$3,384,726, or 24 percent of the total costs claimed. However, for cost sharing contributions, the Center relied only on the subawardees' annual certifications of the amounts claimed, without requesting or maintaining additional documentation to prove the accuracy or validity of the claimed amounts. For NSF-funded subaward costs, the Center only reviewed costs invoiced for budgetary compliance, without reviewing detailed ledgers or other source documentation to support the costs.

As a result, we have questioned \$335,187 of cost share expenditures and \$19,751 of subaward costs for which neither the Center nor the subawardee could provide adequate documentation to support the costs claimed.

Other Compliance & Internal Control Weaknesses

Electronic Payment Approvals – Federal regulations and NSF award terms and conditions require that awardees maintain records and supporting documentation for a specified period of time, generally 3 years. However, the University only maintained some documentation pertinent to purchasing approvals for a period of 90 days. This occurred because the University's new system was not designed to maintain records for the necessary time period. We did not question any costs because we were able to perform alternative audit procedures to verify allowability of sampled costs. However, the University's ability to ensure costs claimed are allowable allocable, reasonable, and properly supported is limited and may result in future questioned costs.

Consulting Costs – Federal cost principles require that in order for a cost to be allowable, it must be reasonable and allocable. However, the SAHRA Center was approving consulting invoices for payment without determining whether those costs were reasonable and allocable. This occurred because a lack of controls over these expenditures allowed the SAHRA Center to presume the costs were allowable without additional review or support. As a result we have questioned a total \$3,812 in consulting and indirect costs that we have found to be unallocable to the NSF award and therefore unallowable.

Payroll Expense – For 18 payroll transactions, out of a sample of 1,132 transactions, the University could not locate signed employee timesheets contrary to Federal regulations and NSF award terms and conditions. This occurred because the University may have misfiled the timesheets. As a result, we have questioned a total of \$28,704 in salary, fringe benefit, and indirect costs.

Publication Costs – The University charged the NSF award for the full amount of invoices for publication costs, although it received a discount from the vendors. This occurred because the University has a policy that provides that discounts on third-party publications will be retained by the University print shop as an offset to overhead. Because this policy is not in conformance with the University's negotiated indirect cost rate, we have questioned a total of \$470 in publications and indirect costs.

SUMMARY OF RECOMMENDATIONS

To address the potential internal control weaknesses, we recommend that the Directors of NSF's Division of Acquisition and Cost Support (DACCS) and the Division of Grants and Agreements (DGA) instruct the University of Arizona to (1) develop and implement written policies and procedures to assess and document each subawardee's risk of claiming non-allocable or non-allowable costs, including cost sharing expenditures; based on these assessments, perform periodic reviews of each subawardee's invoices to ensure costs claimed are allowable, allocable, and properly documented in accordance with NSF regulations and applicable OMB Circulars; review cost sharing expenditures claimed by subawardees for allowability and allocability prior to the inclusion of the amounts in to the University's annual cost sharing certification to NSF; (2) develop and implement written policies and procedures to ensure that approvals for all stages of procurements are maintained in accordance with record retention polices in accordance with NSF regulations and OMB circulars; (3) formally adopt the University's change in procedures for approving consulting costs by implementing written policies and procedures requiring verification of services rendered prior to approving consulting payments; (4) review the record retention policy and modify, if necessary, to ensure timesheets are properly filed and maintained for all employees charging salaries to the NSF award; and (5) review its indirect cost rate to ensure the 2% discount on third-party vendor invoices was properly determined based on the cost accounting standards for the print shop.

SUMMARY OF AUDITEE'S RESPONSE TO AUDIT RESULTS

The University of Arizona has concurred with three of the findings and recommendations noted and have taken corrective actions to develop procedures to strengthen internal controls. In addition, the University has disagreed with two of the findings and have submitted additional documentation to support their position.

See **Appendix** section of this report for a complete copy of University of Arizona's response to the recommendations.

FOLLOW-UP OF PRIOR AUDIT FINDINGS

Since the inception of the grant award, the SAHRA Center has never been audited by NSF or as a major program in the OMB A-133 Single Audit Report. The SAHRA Center's expenditures are included in the University's single audit report and are clustered as part of the University's Research and Development Grants major program; however, a specific financial or compliance review of the SAHRA Center's expenditures had not been performed prior to this audit.

EXIT CONFERENCE

An exit conference was held on March 4, 2005 at the University of Arizona located at 888 N. Euclid Ave., Tucson, Arizona 85721. Preliminary findings and recommendations noted during the audit were discussed with those in attendance. The University was informed that the preliminary findings and recommendations were subject to final review by NSF and the report may include additional findings and recommendations and/or omit certain items discussed.

University of Arizona

<u>Name</u>	<u>Department</u>	<u>Title</u>
██████████	Sponsored Project Services	██████████
██████████	Sponsored Project Services	██████████
██████████	SAHRA Center	██████████
██████████	SAHRA Center	██████████

[REDACTED]	SAHRA Center	[REDACTED]
[REDACTED]	Office of Research & Contract Analysis	[REDACTED]
[REDACTED]	Office of Research & Contract Analysis	[REDACTED]
[REDACTED]	Financial Services Office	[REDACTED]
[REDACTED]	Department of Hydrology & Water	[REDACTED]
[REDACTED]	Department of Hydrology & Water	[REDACTED]

Conrad and Associates, L.L.P.

<u>Name</u>	<u>Title</u>
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

National Science Foundation – Office of Inspector General (OIG)

<u>Name</u>	<u>Title</u>
[REDACTED]	[REDACTED]

A follow up teleconference was held with the University on May 2, 2006. The purpose of the teleconference was to update the University on the latest finding and pending issuance of the draft report.

FINDINGS AND RECOMMENDATIONS

National Science Foundation
Office of Inspector General
4201 Wilson Boulevard
Arlington, Virginia 22230

**REPORT ON COMPLIANCE AND OTHER MATTERS AND INTERNAL CONTROL
OVER FINANCIAL REPORTING BASED ON AN AUDIT PERFORMED
IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

We have audited the Schedule of Award Costs as presented in Schedule A, which summarizes the financial reports submitted by the University of Arizona (University) to the National Science Foundation (NSF) for the awards and periods listed below and have issued our report thereon dated August 5, 2005.

<u>Award Number</u>	<u>Award Period</u>	<u>Audit Period</u>
EAR – 9876800	01/01/00 – 12/31/04	01/01/00 – 09/30/04

We conducted our audit in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States of America, and the *National Science Foundation Audit Guide* (November 2003).

COMPLIANCE AND OTHER MATTERS

Compliance with applicable Federal laws, regulations, and the NSF award terms and conditions is the responsibility of the University's management. As part of obtaining reasonable assurance about whether the financial schedule is free of material misstatement, we performed tests of the University's compliance with certain provisions of laws, regulations, and the NSF award terms and conditions, noncompliance with which could have a direct and material effect on the determination of financial schedule amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion.

The results of our tests disclosed instances of noncompliance described below that are required to be reported under *Government Auditing Standards* and the *National Science Foundation Audit Guide*. We considered these instances of noncompliance in forming our opinion on whether the *Schedule of Award Costs* (Schedule A) presented fairly in all material respects, in conformity with National Science Foundation's policies and procedures, and determined this report does not affect our report dated August 5, 2005 on the financial schedule.

INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of the University is responsible for establishing and maintaining internal control. In fulfilling this responsibility, estimates and judgments made by management are required to assess the expected benefits and related costs of internal control policies and procedures. The objectives of internal control are to provide management with reasonable, but not absolute assurance that assets are safeguarded against loss from unauthorized use or disposition, and that transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of financial schedules in accordance with accounting principles prescribed by the National Science Foundation. Because of inherent limitations in any internal control, misstatements due to errors or fraud may nevertheless occur and not be detected. Also, projection of any evaluation of internal control to future periods is subject to the risk that procedures may become inadequate because of changes in conditions or that the effectiveness of the design and operation of policies and procedures may deteriorate.

In planning and performing our audit of the *Schedule of Award Costs* (Schedule A) for the period January 1, 2000 to September 30, 2004, we considered the University's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the schedule and not to provide an opinion on the internal control over financial reporting. Accordingly, we do not express such an opinion. However, we noted certain matters involving the internal control over financial reporting and its operation that we consider to be reportable conditions under standards established by the American Institute of Certified Public Accountants. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control over financial reporting, that, in our judgment, could adversely affect the University's ability to record, process, summarize, and report financial data consistent with the assertions of management in the financial schedule.

A material weakness is a reportable condition in which the design or operation of one or more of internal control elements does not reduce, to a relatively low level, the risk that misstatements caused by error or fraud in amounts that would be material in relation to the financial schedules being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our consideration of the internal control over financial reporting would not necessarily disclose all matters related to internal control over financial reporting that might be reportable conditions, and, accordingly, would not necessarily disclose all reportable conditions that are also considered to be material weakness.

We noted certain matters described below involving the internal control over financial reporting and its operation that we consider to be reportable conditions. However, we do not consider any of the reportable conditions to be material weaknesses.

Inadequate Subawardee Monitoring

Lack of Controls over Subawardee Cost Sharing Expenditures

The University did not maintain adequate documentation to support cost sharing expenditures claimed by its subawardees, or require such documentation from its subawardees, contrary to Federal regulations and NSF award terms and conditions. This occurred because the University does not have adequate controls in place to ensure that all subawardee cost sharing expenditures are accurate, allocable, allowable, and adequately documented. As a result, we have questioned \$335,187 in cost sharing expenditures out of \$2,544,856 selected for review.

NSF Grant General Conditions, Article 22, Section C, requires an awardee to maintain records of all claimed project costs including both cost sharing and costs to be paid NSF. OMB Circular A-110, Subpart C, Section .23(a), prescribes the criteria and procedures for the allowability of cost sharing expenditures and requires, among other things, that cost sharing meet the same cost principles as costs to be paid by NSF. In addition, OMB Circular A-110, Subpart C, Section .51(a), requires awardees to manage and monitor subawards.

On an annual basis, the University requires its subawardees to complete cost sharing certifications of their cost sharing expenditures claimed to date. Using these certifications and its own cost sharing expenditure information, the University compiles an overall cost sharing certification that it submits to NSF. As of August 31, 2004, subawardees, in total, had provided approximately \$1 million of the \$6.6 million cost sharing expenditures claimed by the University. However, these subawardee certifications are the only source documentation maintained by the University to support the subawardee amounts claimed as cost sharing. No other detail listing or source documentation is submitted by the subawardee with its certifications to support the cost sharing claimed. In addition, the University has no process in place to verify the accuracy and validity of the expenses claimed on the subawardee certifications. The University relies solely on the subawardees' certifications to ensure the cost sharing amounts it claims to NSF are accurate and properly documented.

Because the University has no process in place for verifying the validity of cost sharing claimed by its subawardees, we conducted additional testing of subawardee cost sharing. Based on our review of a sample of cost sharing expenditures claimed, we found that \$335,187 of the costs claimed as cost sharing were

inadequately supported by source documentation. This amount includes cost sharing claimed by two subawardees that failed to provide any source documentation to support the claimed costs.

As a result of the lack of controls ensuring the accuracy and validity of cost sharing claimed by the University and its subawardees, the University may be certifying to cost sharing expenditures that either may not exist or are not allowable per Federal and NSF regulations. In addition, this lack of subawardee oversight could result in the University not meeting its overall cost-sharing requirement at the end of the award period.

Consequently, out of \$2,544,856 in costs selected for review, we have questioned cost sharing expenditures totaling \$335,187 as follows: (Also see Schedule of Questioned Costs, Schedule B, Note B-6)

Subawardee	Exceptions Noted	Reviewed Costs	Questioned Costs
Arizona State University	Claimed payroll expense did not agree with submitted supporting payroll documentation.	\$ 25,475	\$ 1,160
New Mexico Institute for Mining & Technology (NMT)	Detailed ledgers provided by NMT did not agree with the amounts reported on University of Arizona's annual cost share certification.	109,336	118,207
Pennsylvania State University	No documentation (supporting schedules, detail ledgers, or source documents) was provided to support the amounts claimed.	0	139,327
University of California, Riverside	Source documents were not provided to support the sample transactions selected for review.	22,180	66,448
University of New Mexico	Submitted source documentation (payroll records) indicated an amount less than the amount reported by the University of Arizona.	120,779	10,045
All Other Subawardees	No exceptions noted.	407,890	0
Total		\$ 685,660	\$ 335,187

Lack of Controls over Subawardee Costs Funded by NSF

Contrary to applicable Federal regulations and the NSF award terms and conditions, the University did not adequately monitor and report subaward costs charged to the NSF award. This occurred because the University lacks an adequate risk-based system and policies and procedures to monitor and report its subaward costs. As a result, we have questioned subaward costs totaling \$19,751 out of \$1,914,520 selected for review.

OMB Circular A-110, Subpart C, Section .51 (a), requires recipients to manage and monitor each project, program and sub award. In addition, Subpart C, Section .21 (b)(1) requires accurate, current, and complete disclosure of the financial results of each Federally sponsored project or program. Moreover, OMB Circular A-133, Subpart D, Section 400(d.3) requires an awardee to "monitor the activities of subrecipients as necessary to ensure that federal awards are used for authorized purposes in compliance with laws, regulations, and the provisions of contracts or grant agreements and that performance goals are achieved."

SAHRA has 12 subawards totaling \$3,384,726 in claimed costs, which represent 32 percent of the total direct costs claimed on the NSF award. Depending on the cash flow necessity, subawardees could either bill the University on a monthly or quarterly basis. In either case, subawardees would submit an invoice, which is processed within the University as a payment to vendors. The invoice is reviewed for budgetary compliance and approved by the Business Manager assigned to monitor SAHRA Center expenditures and paid through the University's Financial Service Office. However, there are no additional policies or internal controls to ensure the amounts on the invoices are accurate, allocable, allowable, and properly supported per NSF and OMB grant requirements. The University had assumed that the certified invoices from the subawardees were sufficient to support the costs claimed. It also assumed that a clean review of the subawardee's A-133 Single Audit report, along with an invoice signed by a responsible fiscal person at the subawardee, allowed the University to accept the claimed costs as valid and allowable.

Because the University has no process in place for verifying the validity of costs claimed by its subawardees, we conducted additional testing of subawardee expenditures. During our audit, we selected a sample of invoices from each subawardee and requested the subawardees to submit source documentation supporting the amounts claimed on the selected invoices. After extensive review of all the source documentation submitted, we noted that most of the costs claimed by the subawardees were properly supported. However, there were a few subawardees where some of the costs claimed were either inadequately supported or no source documentation was provided.

This lack of internal controls in place to review costs claimed by subawardees also limits the University's ability to ensure costs charged to the NSF award are accurate, valid, allowable, and adequately documented per NSF regulations and OMB Circular.

As a result, out of \$1,914,520 in costs selected for review, we questioned subaward costs totaling \$19,751 as follows: (Also see Schedule of Questioned Costs, Schedule B, Note B-4)

Subawardee	Exceptions Noted	Reviewed Costs	Questioned Costs
University of California, Los Angeles	<ul style="list-style-type: none"> Documentation was not provided for 14 transactions claimed. Eleven transactions were supported only with vendor price quotes and purchase orders, rather than invoices to evidence the actual purchase and associated cost. 	\$ 144,488	\$ 909
University of California, Riverside	<ul style="list-style-type: none"> Amount claimed on 1 transaction did not agree with the travel expense document. Also, supporting travel expense invoices and receipts were not provided. 	85,978	843
Columbia University – Biosphere	<ul style="list-style-type: none"> No documentation was provided to support any of the costs claimed. Records were unavailable for our review due to an ongoing legal dispute unrelated to our audit. 	16,139	17,999
All Other Subawardees	<ul style="list-style-type: none"> No exceptions noted. 	1,667,915	0
Total		\$1,914,520	\$ 19,751

Recommendation No. 1

We recommend that NSF's Directors of DACS and DGA instruct the University of Arizona to develop and implement written policies and procedures to assess and document each subawardee's risk of claiming non-allocable or non-allowable costs, including cost sharing expenditures. Based on the level of risk assessed, the University should perform periodic reviews of each subawardee's invoices to ensure costs claimed are allowable, allocable, and properly documented in accordance with NSF regulations, OMB Circulars A-110 and A-133, and any other applicable OMB Circulars. In addition, these policies and procedures should include a process for reviewing cost sharing expenditures claimed by subawardees for allowability and allocability prior to the inclusion of the amounts in the University's annual cost sharing certification to NSF. These reviews should allow the University the ability to provide reasonable assurance that all costs claimed are accurate, allowable, and properly documented per NSF regulations and OMB Circulars.

Awardee Comments

The University concurs with the finding and will develop and implement written policies and procedures to assess and document each subawardee's risk of claiming non-allocable or non-allowable costs, including cost sharing expenditures. The responsible departments within the University will be advised for appropriate monitoring activities according to the risk levels of subawardees. The University expects to complete the development of written policies and procedures by June 30, 2006.

Auditor's Response

We acknowledge and concur with the University's development of written policies and procedures to assess and document each subawardee's risk of claiming non-allocable and/or non-allowable costs.

Other Compliance & Internal Control Weaknesses

Inadequate Retention of Electronic Payment Approvals

Federal regulations and NSF award terms and conditions require that awardees maintain records and supporting documentation for a specified period of time, generally 3 years. However, the University only maintained some documentation pertinent to purchasing approvals for a period of 90 days. This occurred because the University's new system was not designed to maintain records for the necessary time period. We did not question any costs because we were able to perform alternative audit procedures to verify allowability of sampled costs. However, the University's ability to ensure costs claimed are allowable allocable, reasonable, and properly supported is limited and may result in future questioned costs.

OMB Circular A-110, Subpart C, Section .53(b), and NSF Grant General Conditions, Article 23(a) require awardees to retain "Financial records, supporting documents, statistical records, and all other records pertinent of an award" for a period of three years from the submission of final reports on the award.

The University's accounting system includes a component for electronic-signature approval of non-payroll transactions. This system is designed to ease administrative burden and provide a more streamlined and paperless process. During our review of equipment costs charged to the NSF award, we found two separate transactions for computers and printers totaling \$12,835. Our review of the supporting documentation indicated the approvals of the purchase order, acceptance and receipt of goods, and authorization of the payment were evidenced with electronic signatures through the University's accounting system. However, the system only maintains the signature for 90 days – hard copies of the electronic signatures are not maintained as part of the documentation supporting the transaction. Also, while the University does require manually prepared and approved requisition orders for equipment and supply purchases, the University was unable to provide them for our sampled transactions. Without the signed requisitions, we could not determine whether purchases were properly approved. However, we were able to perform alternative audit procedures to verify the existence of the sampled equipment charged to the NSF award and validate its use at the SAHRA Center. Consequently, we have not questioned any costs associated with these equipment purchases.

This occurred because the University has indicated that its accounting system only has the memory capacity to maintain signatures for a period of 90-days after payment. In addition, the University's external auditors have reviewed this system and its control environment and deemed them adequate. However, the external auditors have had to rely on paper documentation when testing transactions outside of the 90-day retention window. This paper documentation was unavailable for the equipment transactions sampled in our audit and reveals a potential inconsistency in how the University is maintaining purchase approval records.

Federal regulations and NSF award terms and conditions relating to record retention are designed so that awardees can maintain a clear audit trail to document approvals of purchases using NSF funds. The University's failure to fully comply with the record retention requirements limits the University's ability to ensure costs claimed to the NSF award are allowable, allocable, reasonable, and properly supported per NSF regulations and OMB Circulars.

Recommendation No. 2

We recommend that NSF's Directors of DACS and DGA instruct the University of Arizona to develop and implement written policies and procedures to ensure that approvals for all stages of procurements are properly maintained in accordance with record retention polices in NSF regulations and OMB circulars. This may include a modification to the memory capacity of the accounting system, or the retention of paper records documenting the electronic approvals.

Awardee Comments

The University of Arizona does not concur that the University's electronic payment approvals were inadequately retained. The University's on-line Department Purchase Requisitions (DPR) System does retain payment approval signatures. DPR records are retained electronically in perpetuity via magnetic tape. Copies of the archived DPR records supporting the transactions in question were submitted with the response.

Auditor's Response

Based on several meetings with the University's management during field work and discussions with the external auditors, it was determined and agreed by everyone that the accounting system does not have the capabilities to retain approvals beyond 90 days after payment. System printouts provided during field work did not have any of the approvals shown, unlike the documentation submitted. As such, without performing additional review of the accounting system and how DPR records are electronically retained, we are only able to place limited reliance on the documentation. Therefore, the finding and recommendation remains unchanged.

Inadequate Review of Consulting Expenditures

Federal cost principles require that in order for a cost to be allowable, it must be reasonable and allocable to the NSF award. However, the SAHRA Center was approving consulting invoices for payment without determining whether those costs were reasonable and allocable. This occurred because a lack of policies and procedures over these expenditures allowed the SAHRA Center to presume the costs were allowable without additional review or support. As a result we have questioned a total of \$3,812 in consulting and indirect costs that we have found to be unrelated to the NSF award and therefore unallowable.

OMB Circular A-21, Part C, section 2 states that for costs to be allowable, they must be both reasonable and allocable. In addition, OMB Circular A-21, Part C, section 3 defines a cost as reasonable if "the nature of the goods or services acquired or applied, and the amount involved therefore, reflect the action that a prudent person would have taken under the circumstances prevailing at the time the decision to incur the costs was made..." Further, OMB Circular A-21, Part C, section 4(a) states a cost is allocable "if the goods or services involved are chargeable or assignable to such cost objectives in accordance with relative benefits received or other equitable relationship..."

Our review of consulting costs disclosed that the SAHRA Center Business Manager approved all consulting invoices for payment. The Business Manager reviewed the invoices to determine whether they were for activities and items that were consistent with the contract requirements. However, the Business Manager was not required to verify with the Principal Investigator (PI) or Macro Theme Leaders that the actual consulting services were rendered. Instead, the invoice was assumed to be payable unless the Business Manager was informed by the PI or the Macro Theme Leaders about a particular problem with the consulting services and/or contract. The Business Manager did not have any daily contact with the consultants and also did not review any of the work performed by the consultants. It was assumed the PI and/or the Macro Theme Leaders would inform the Business Manager of any problem with consulting services. It was also presumed that a lack of communication was an indication of approval to pay the invoice.

As a result, our review of consulting costs disclosed one transaction reimbursing a consultant for travel expenses, for which there was no documentation to support the purpose of the trip. Without this documentation, we were unable to determine if the expense benefited and therefore was allocable to the award. Out of \$70,286 in costs selected for review, we have questioned consulting costs of \$2,516 and the associated indirect costs of \$1,296, for a total of \$3,812. (Also see Schedule of Questioned Costs, Schedule B, Note B-3)

Beginning January 1, 2005, the University now requires the Business Manager to obtain formal written confirmation, prior to payment, from either the PI or Macro Theme Leader confirming the consulting services have been rendered in accordance with the contract or the billing reflects the actual progress or performance. In addition, the University made a journal entry in February 2005 to remove the consultant travel expenses mentioned above from the NSF award. Although the University has corrected the entry, the costs will remain

questioned as our audit period ends September 30, 2004 and the costs were claimed on the 9/30/04 FCTR. However, the University has not fully corrected the control weakness, because although the Business Manager now engages in a new practice of seeking formal confirmation prior to approving consulting costs, this practice needs to be formally documented as a written policy.

The lack of policies and procedures to review consulting invoices to ensure services have been rendered according to contracted terms limits the University's ability to ensure consulting costs charged to the NSF award are allowable, allocable, reasonable, and properly supported.

Recommendation No. 3

We recommend that NSF's Directors of DACS and DGA instruct the University of Arizona to formalize into a written policy its current practice of requiring the Business Manager to obtain formal written confirmation that the consulting services have been rendered in accordance with the contract or the billing reflects the actual progress or performance.

Awardee Comments

The University of Arizona concurs with the recommendation that the University should institute a formal policy to require principal investigators or appropriate individuals on the research team to approve consulting services received before payment is processed. The University is in the process of formalizing this practice into a written policy in University policy manuals.

Auditor's Response

We acknowledge and concur with the University's plan to institute a formal policy within the University's procedure manuals.

Inadequate Documentation of Payroll Expenses

For 18 payroll transactions, out of a sample of 1,132 transactions, the University could not locate signed employee timesheets as required by Federal regulations and NSF award terms and conditions to support labor costs charged to the award. This occurred because the University may have misfiled the timesheets. As a result, we have questioned a total of \$28,704 in salary, fringe benefits, and associated indirect costs.

OMB Circular A-21, Part J, Section 10 requires proper documentation of payroll expenditures including signed timesheets. In addition, OMB Circular A-110 Subpart C, Section .53(b), and NSF Grant General Conditions, Article 23(a) require awardees to retain "Financial records, supporting documents, statistical records, and all other records pertinent of an award" for a period of three years from the submission of final reports on the award. The University has policies requiring employees working on Federal grants to document their time spent on a particular project. At the end of each pay period, employees are required to complete a time sheet to indicate which project they worked on and the labor hours worked contributed to that project. The employee and a supervisor with direct knowledge of the employee's work must sign each of the time sheets. Employees are not paid without a properly completed timesheet on file with the payroll department.

During our audit, we sampled 1,132 payroll transactions covering 14 pay periods and our review disclosed 18 exceptions. A total of 18 payroll transactions, representing only 1.6% of those tested, were not supported with a signed timesheet from the employee. For 14 of these transactions, the University was unable to locate the timesheets. For 4 others, we also found no timesheets. These 4 transactions were associated with employees with academic appointments, for which the University does not require timesheets and believes the costs should not be questioned. However, OMB Circulars still require an after-the-fact certification signed by the employee, principal investigator, or responsible official to certify the level of effort performed for the project. As a result, we have questioned \$16,011 of salary expense, \$2,936 of related fringe benefit costs, and \$9,757 of indirect costs claimed on the salary and fringe benefit costs. (Also see Schedule of Questioned Costs, Schedule B, Notes B-1 and B-2)

For the 14 transactions not associated with academic appointments, the University believes the timesheets may have been misfiled, which prevents a quick and easy retrieval of the records. In addition, the University believes that its controls over payroll expenditures would have prevented the payment to employees who did not properly complete a timesheet. However, for the 4 transactions associated with academic appointments, the University does not require signed certification of the employee's effort.

The lack of properly completed timesheets to support salary expenses claimed limits the University's ability to ensure the costs charged to award actually benefited the award. Without properly completed and signed timesheets, it could not be determined if costs are properly allocable and allowable per NSF regulations and OMB Circulars.

Recommendation No. 4

We recommend that NSF's Directors of DACS and DGA instruct the University of Arizona to review their record retention policy and modify, if necessary, to ensure timesheets are properly filed and maintained for all employees charging salaries to the NSF award.

Awardee Comments

The University concurs with the recommendation that timesheets should be properly filed and maintained at the SAHRA Center. However, the University does not concur that all 18 transactions should be questioned, as six of the transactions (four related to academic personnel and two removed from the grant) should not be questioned.

In addition, the University does not concur with the finding stating the University has no signed certification of an employee's effort for the academic personnel. Although the University does not require timesheets for academic personnel, the payroll time roster is verified and certified electronically on a biweekly basis by the department authorized official for all employees. Starting January 1, 2006, the business manager has taken an additional step to require the PI approve and certify the work performed by all employees on the grant on a quarterly basis.

Furthermore, the University believes that the two transactions, which were transferred out of the grant in October 2004, should not be questioned. The two transactions were posting errors and removed from the grant when detected. Although the correction was not made within the audit period, it was made before the start of audit. Internal controls were strengthened by requiring the accountant to review payroll details and remove the erroneous postings promptly.

Auditor's Response

Based on reviewing policies and procedures and discussions with SAHRA personnel during field work, we agree that the payroll time roster is verified and certified electronically on a biweekly basis. However, it was clearly indicated in discussions by the departments' authorized approver that the verification and approval process was to ensure timesheets for all employees matched the register and were signed by the employee and supervisors. Nonetheless, we acknowledge and concur with the University's policy to require the PI to approve and certify the work by all employees on the grant on a quarterly basis.

During the field work, we reviewed the journal entries, which removed the two transactions posted in error. However, the scope of the audit was for the period of January 1, 2000 to September 30, 2004 and the journal entries were made in October 2004, which is outside our audit period. Therefore, questioned costs remain unchanged.

Overcharging of Publication Costs

The University charged the NSF award for the full amount of invoices for publication costs, although it received a discount from the vendors. This occurred because the University has a policy that provides that discounts on

third-party publications will be retained by the University print shop as an offset to overhead. Because this policy is not in conformance with the University's negotiated indirect cost rate, we have questioned a total of \$470 in publications and indirect costs.

Our review of publication costs identified three transactions, which were billed to SAHRA from the University's central print shop. Supporting documentation indicated the work was actually performed by a third party vendor and billed to the University. The vendor's invoice provided for a 2% discount for the work performed and the University's payment to the vendor took advantage of this discount. However, the University charged the full amount of the invoice to the NSF award rather than passing the savings on to the NSF award as required. Instead, the University's print shop retained the 2% discount as revenue to help offset its overhead costs.

The University negotiates its indirect cost rate with the Department of Health and Human Services (HHS). As required, the University also submits a Cost Accounting Standards Board Disclosure Statement that describes how it accounts for administrative and overhead costs. This statement reveals that the University print shop is funded through user fees that are based on a combination of historical and projected costs. The University provided no additional documentation to indicate whether the 2% discount on third-party vendor invoices was properly determined based on the cost accounting standards for the print shop. In addition, an HHS representative does not believe that the 2% administrative fee is in conformance with the University's negotiated rate structure. As a result, out of \$21,728 in costs selected for review, we have questioned \$310 of publication costs and the associated indirect costs of \$160, for a total of \$470. (Also see Schedule of Questioned Costs, Schedule B, Note B-7)

Recommendation No. 5

We recommend that NSF's Directors of DACS and DGA instruct the University of Arizona to review its indirect cost rate to ensure the 2% discount on third-party vendor invoices is proper under the University's cost accounting standards and does not result in an overcharge to the NSF award.

Awardee Comments

The University does not concur with the finding as they believe the 2% discount was passed onto the NSF award. The University Printing and Graphics Services (P&Gs) processes printing orders for departments and adds a 2% handling charge to recover applicable internal service center coordination/processing costs. Such costs are not included in the University's Facilities & Administrative (F&A) rates. P&G sets a billing rate of 2% to recover operating costs, equipment depreciation, and buildings and improvement use allowances. Documentation showing P&G's rates has been submitted with the response. In addition, the University discussed the finding with their HHS representative and HHS agrees that P&G is a service unit and its operating costs are not factored into the University's F&A rates.

Auditor's Response

We have reviewed the submitted documentation and acknowledge that the P&G is a service unit within the University. However, from the documentation submitted, it is not clearly documented how the 2% calculation covers P&G operation costs. Specifically, the University's Printing & Graphic Services states it manages the print program and "charges a 2% administrative fee for these services." The University submitted a trial balance of P&G costs for fiscal year end 2005, however, it was still unclear how the University calculated the 2% charge. As such, we are unable to determine if 2% is an equitable assessment. Therefore, the finding and recommendation remain unchanged.

We considered these internal control weaknesses in forming our opinion of whether Schedule A is presented fairly in all material respects, in conformity with National Science Foundation policies and procedures, and determined that this report does not affect our report dated August 5, 2005 on the financial schedule.

This report is intended solely for the information and use of the University of Arizona's management, the National Science Foundation, the Office of Management and Budget, and the Congress of the United States of America and is not intended to be and should not be used by anyone other than those specified parties.

Irvine, California
August 5, 2005

**FINANCIAL SCHEDULES AND
SUPPLEMENTAL INFORMATION**

National Science Foundation
Office of Inspector General
4201 Wilson Boulevard
Arlington, Virginia 22230

INDEPENDENT AUDITORS' REPORT ON FINANCIAL SCHEDULES

We have audited the costs claimed by the University of Arizona (University) to the National Science Foundation (NSF) on the Federal Cash Transactions Reports – Federal Share of Net Disbursements for the NSF award listed below. In addition, we have also audited the amount of cost sharing claimed on the award. The Federal Cash Transactions Reports - Federal Share of Net Disbursements, as presented in the *Schedule of Award Costs* (Schedule A), are the responsibility of the University's management. Our responsibility is to express an opinion on Schedule A based on our audit.

<u>Award Number</u>	<u>Award Period</u>	<u>Audit Period</u>
EAR – 9876800	01/01/00 – 12/31/04	01/01/00 – 09/30/04

Except as discussed in the following paragraph, we conducted our audit in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States of America, and the *National Science Foundation Audit Guide (November 2003)*. Those standards and the *National Science Foundation Audit Guide*, require that we plan and perform the audit to obtain reasonable assurance that the financial schedules are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial schedules. An audit also includes assessing the accounting principles used and the significant estimates made by management, as well as evaluating the overall financial schedule presentation. We believe our audit provides a reasonable basis for our opinion.

The accompanying financial schedule was prepared in conformity with the requirements of the *National Science Foundation Audit Guide* as described in the Notes to the Schedules, and is not intended to be a complete presentation of financial position in conformity with accounting principles generally accepted in the United States of America.

Schedule B identifies \$52,737 of NSF-funded and \$335,187 of cost sharing costs that are questioned as to their allowability under the award agreements. Questioned costs are (1) costs for which there is documentation that the recorded costs were expended in violation of the law, regulations or specific conditions of the award, (2) costs that require additional support by the awardee, or (3) costs that require interpretation of allowability by the National Science Foundation – Division of Acquisition and Cost Support (DACs). The National Science Foundation will make the final determination regarding whether such costs are allowable. The ultimate outcome of this determination cannot presently be determined. Accordingly, no adjustment has been made to costs claimed for any potential disallowance by NSF.

In our opinion, except for the questioned costs identified in Schedule B, the financial schedule referred to above presents fairly, in all material respects, the costs claimed on the Federal Cash Transactions Reports as presented

in the Schedule of Award Costs (Schedule A), for the period January 1, 2000 to September 30, 2004 in conformity with the *National Science Foundation Audit Guide*, *NSF Grant Policy Manual*, terms and conditions of the NSF award and on the basis of accounting described in the Notes to the Financial Schedules.

In accordance with *Government Auditing Standards*, and the provisions of the National Science Foundation Audit Guide, we have also issued a report dated August 5, 2005 on our tests of the University's compliance with certain provisions of laws, regulations, the provisions of the *National Science Foundation Audit Guide*, and the award applicable to the University and conditions and our consideration of the University's internal control over financial reporting. The purpose of that report is to describe the scope of our testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

This report is intended solely for the information and use of the University of Arizona's management, the National Science Foundation, the Office of Management and Budget, and the Congress of the United States of America and is not intended to be and should not be used by anyone other than these specified parties.

Irvine, California
August 5, 2005

UNIVERSITY OF ARIZONA
National Science Foundation Award Number EAR-9876800
Schedule of Award Costs
January 1, 2000 - September 30, 2004
Interim

<u>Cost Category</u>	<u>Approved Budget</u>	<u>Claimed Costs (A)</u>	<u>Costs Selected for Review</u>	<u>Questioned Costs</u>	<u>Schedule Reference</u>
Direct costs:					
	\$				
Salaries and wages	5,459,754	4,639,849	956,165	16,011	B-1
Fringe benefits	859,096	807,104	168,977	2,936	B-2
Equipment	777,389	553,990	117,204	-	
Travel	382,500	314,927	68,818	-	
Participant support	288,174	214,420	73,605	-	
Other direct costs:					
Material and supplies	455,406	452,873	95,576	-	
Publication	100,666	60,308	21,728	310	B-7
Consulting	44,000	119,337	70,286	2,516	B-3
Subawards	4,425,208	3,384,726	1,914,520	19,751	B-4
Other direct costs	<u>181,810</u>	<u>145,500</u>	<u>29,913</u>	<u> -</u>	
Total direct costs	12,974,003	10,693,034	3,516,792	41,524	
Indirect costs	<u>4,018,246</u>	<u>3,476,280</u>	<u>3,476,280</u>	<u>11,213</u>	B-5
Total	<u>\$ 16,992,249</u>	<u>14,169,314</u>	<u>6,993,072</u>	<u>52,737</u>	
Cost sharing	<u>\$ 6,691,853</u>	<u>6,658,098</u>	<u>2,544,856</u>	<u>335,187</u>	B-6

(A) - The total claimed costs agrees with the total expenditures reported by the University of Arizona on the Federal Cash Transaction Report - Federal Share of Net Disbursements as of the quarter ended September 30, 2004. Claimed costs reported above are taken from the awardee's books of accounts.

UNIVERSITY OF ARIZONA

National Science Foundation Award Number EAR - 9876800
 Schedule of Questioned Costs
 From January 1, 2000 to September 30, 2004

Note B-1

Salaries & Wages

During our review of Salaries & Wages, we selected a random sample of 14 pay periods for review, which resulted in a total of 1,132 payroll transactions. For each transaction, we requested time sheets and payroll distribution reports for further review. Our review disclosed 18 payroll transactions in which no time sheets were available to support the salary amount charged to the NSF award. The University has implemented policies and procedures requiring all employees to submit a signed time sheet in order to be paid for a pay period.

Of the 18 payroll transactions, we identified four of the transactions as pertaining to individuals who are on academic appointment, which do not require timesheets. However, OMB Circulars still require an after-the-fact certification documenting the level of effort for professors who do not complete timesheets.

The University reversed two of the 18 transactions out of the general ledger in October 2004. However, such action was outside the scope of the audit. The two transactions were reported and charged to the award as of September 30, 2004.

Without properly completed time sheets to support salary & wage expenses charged to the NSF award, we could not determine whether the costs were allocable to the award. As a result, we have questioned \$16,011 of salary & wage expenses as follows: (See Finding and Recommendation No. 4 in the *Report on Compliance and Other Matters and Internal Controls over Financial Reporting*.)

<u>Check Date</u>	<u>Number of Transactions</u>	<u>Questioned Salary Amount</u>
06/29/01	2	\$ 692
07/13/01	1	100
06/28/02	2	680
07/12/02	3	6,443
07/11/03	4	4,336
07/25/03	1	776
08/08/03	1	776
06/11/03	2	1,288
07/23/04	<u>2</u>	<u>920</u>
Total	<u>18</u>	<u>\$ 16,011</u>

Awardee's Response

The University concurs that 12 timesheets were misfiled and the payroll transactions is unsupported, totaling \$5,693. However, the University believes that six transactions (four related to academic personnel and two removed from the grant) should not be questioned.

In addition, the University does not concur with the finding stating the University has no signed certification of an employee's effort for the academic personnel. Although the University does not require timesheets for academic personnel, the payroll time roster is verified and certified electronically on a biweekly basis by the department authorized official for all employees. Starting January 1, 2006, the business manager has taken an additional step to require the PI approve and certify the work performed by all employees on the grant on a quarterly basis.

UNIVERSITY OF ARIZONA

National Science Foundation Award Number EAR - 9876800
 Schedule of Questioned Costs
 From January 1, 2000 to September 30, 2004

(Continued)

Note B-1 **Salaries & Wages, (Continued)**

Awardee's Response, (Continued)

Furthermore, the University believes that the two transactions, which were transferred out of the grant in October 2004, should not be questioned. The two transactions were posting errors and removed from the grant when detected. Although the correction was not made within the audit period, it was made before the start of audit. Internal controls were strengthened by requiring the accountant to review payroll details and remove the erroneous postings promptly.

Auditor's Response

Based on reviewing policies and procedures reviewed and discussions with SAHRA personnel during field work, we agree that the payroll time roster is verified and certified electronically on a biweekly basis. However, it was clearly indicated in discussions by the departments' authorized approver that the verification and approval process was to ensure timesheets for all employees matched the register and were signed by the employee and supervisors. Nonetheless, we acknowledge and concur with the University's policy to require the PI to approve and certify the work by all employees on the grant on a quarterly basis.

During the field work, we reviewed the journal entries, which removed the two transactions posted in error. However, the scope of the audit was for the period of January 1, 2000 to September 30, 2004 and the journal entries were made in October 2004, which is outside our audit period. Therefore, questioned costs remain unchanged.

Note B-2 **Fringe Benefits**

As a result of questioned salary & wage expense (Note B-1), we have also questioned the associated fringe benefits for those employees as follows: (See Finding and Recommendation No. 4 in the *Report on Compliance and Other Matters and Internal Controls over Financial Reporting.*)

<u>Check Date</u>	<u># of Transactions</u>	<u>Questioned Salary Amount</u>
06/29/01	2	\$ 131
07/13/01	1	2
06/28/02	2	26
07/12/02	3	1,261
07/11/03	4	795
07/25/03	1	113
08/08/03	1	113
06/11/03	2	186
07/23/04	<u>2</u>	<u>309</u>
Total	<u>18</u>	<u>\$ 2,936</u>

UNIVERSITY OF ARIZONA

National Science Foundation Award Number EAR - 9876800
 Schedule of Questioned Costs
 From January 1, 2000 to September 30, 2004

(Continued)

Note B-2 Fringe Benefits, (Continued)

Awardee's Response

The University does not concur with the amount questioned for salaries and wages. As a result, the University believes that only 12 transactions are unsupported totaling, \$753.

Auditor's Response

Based on our review of the University's response to Note B-1, questioned costs remained unchanged. As such, the corresponding fringe benefit costs also remain unchanged.

Note B-3 Consulting Costs

We selected a random sample of 30 transactions charged as consulting costs to the NSF award for review. We then reviewed supporting documentation for each of the transactions to determine if the costs were allowable and allocable to the award. Our review disclosed one transaction for a consultant's travel reimbursement to Brazil. However, the documentation failed to disclose the purpose and benefit of the trip. Without the proper documentation, we could not determine whether the expense was allocable to the award. Further review by University officials indicated the expense did not relate to the NSF award and the University made a journal entry in February 2005 to remove the expense from the account used to track expenses related to the award. However, the audit period of this report is January 1, 2000 through September 30, 2004 and the consulting costs were claimed against the NSF award as of September 30, 2004. As a result, we have questioned \$2,516 of consulting costs as follows: (See Finding and Recommendation No. 3 in the *Report on Compliance and Other Matters and Internal Controls over Financial Reporting*.)

<u>Consultant</u>	<u>Date</u>	<u>University Document Number</u>	<u>Questioned Amount</u>
██████████	09/03/04	K822663	\$ 2,516

Awardee's Response

The University concurs the consulting costs of \$2,516 should not have been charged to the grant. The University has removed the costs and associated indirect costs from the grant in February 2005. In addition, the SAHRA center has implemented formal approval process for consulting expenditures since January 1, 2005. This new practice should eliminate wrong charges of consulting costs to the grant.

UNIVERSITY OF ARIZONA

National Science Foundation Award Number EAR - 9876800
 Schedule of Questioned Costs
 From January 1, 2000 to September 30, 2004

(Continued)

Note B-3 Consulting Costs, (Continued)

Auditor's Response

We acknowledge that a journal entry was made to remove the costs from accounting records maintained to track grant costs. However, the audit period of this report was from January 1, 2000 through September 30, 2004. Cumulative costs on the FCTR submitted for the quarter ending September 30, 2004 was the basis of our audit. The correction was outside the scope of the audit and the costs were claimed and NSF funds were drawn during our audit period. As a result, the questioned costs remain unchanged.

Note B-4 Subaward Costs

Depending on the cash flow necessity, subawardees could either bill the University on a monthly or quarterly basis. In either case, subawardees would submit an invoice, which is processed within the University as a payment to vendors. The invoice is reviewed for budgetary compliance and approved by the Business Manager assigned to monitor SAHRA Center expenditures and paid through the University's Financial Service Office. However, there are no additional policies or internal controls to ensure the amounts on the invoices are accurate, allocable, allowable, and properly supported per NSF and OMB regulations. The University had assumed that the certified invoices from the subawardees were sufficient to document the costs claimed. It also assumed that a clean review of the subawardees' A-133 Single Audit report, allowed the University to accept the invoice, which was signed by responsible fiscal personnel at the subawardees, as accurate and complete.

We selected a sample of invoices from each subawardee and requested the subawardees to submit source documentation to support the amounts claimed on the selected invoices. After extensive review of all the source documentation submitted, we noted that several subawardees either did not provide documentation or the documentation was inadequate to determine if the costs were allocable to the award. As a result, we have questioned \$37,003 of subaward costs as follows: (See Finding and Recommendation No. 1 in the *Report on Compliance and Other Matters and Internal Controls over Financial Reporting*.)

<u>Subawardee</u>	<u>Questioned Costs</u>
University of California, Los Angeles	\$ 909
University of California, Riverside	843
Columbia University – Biosphere	<u>17,999</u>
Total	<u>\$ 19,751</u>

University of California, Los Angeles (UCLA)

As of September 30, 2004, the University of Arizona's detail ledgers indicated total costs incurred by UCLA was \$311,963. We selected for review a sample of two invoices, totaling \$144,488. Our review indicated either that some costs were not adequately documented with vendor invoices or UCLA did not provide supporting documentation. Without the proper documentation, we could not determine whether the costs were allowable and allocable to the award. As a result, we have questioned \$909 of costs claimed by UCLA as follows:

UNIVERSITY OF ARIZONA
 National Science Foundation Award Number EAR - 9876800
 Schedule of Questioned Costs
 From January 1, 2000 to September 30, 2004

(Continued)

Note B-4 **Subaward Costs, (Continued)**

<u>Invoice Number</u>	<u>Transaction Date</u>	<u>Trans Ref GL</u>	<u>Questioned Amount</u>	<u>Notes</u>
3	04/26/01	0135TBB686	\$ 308	B
3	12/05/01		163	C
8	05/01/03	017792	79	A
8	07/07/03	018659	(1)	A
8	07/31/04	Unknown	8	A
8	12/31/02	0135TDB376	200	A
8	09/22/04		<u>152</u>	C
Total			<u>\$ 909</u>	

Notes

- (A) No documentation provided.
- (B) Total amount charged was \$573 for travel expense to attend the SAHRA annual meeting. An expense report and receipts were provided, however, the hotel bill of \$308 was a blank sheet with the hotel logo imprinted on the top. As such, we were unable to verify the accuracy of hotel costs.
- (C) Indirect cost portion claimed on questioned costs.

University of California, Riverside (UCR)

As of September 30, 2004, the University of Arizona's detail ledgers indicated total costs incurred by UCR was \$178,846. We selected for review a sample of two invoices, totaling \$85,978. Our review indicated the amount reported on one invoice was higher by \$843 than the amount reported in UCR records. UCR submitted additional documentation to support the variance. The documentation submitted was a travel reimbursement form totaling \$1,639. However, there were no invoices or receipts to support the travel reimbursement form. In addition, there was no reconciliation or allocation documentation to support how the \$1,639 related to the difference in question. As a result, we have questioned \$843 of costs claimed by UCR.

Columbia University - Biosphere (CUB)

As of September 30, 2004, the University of Arizona's detail ledgers indicated total costs incurred by CUB was \$17,999. We selected for review a sample of one invoice, totaling \$16,139. However, CUB was not able to provide any documentation to support the claimed costs. Due to legal issues regarding a split in the organization, all financial records have been seized by the attorneys and are unavailable for audit review. The University of Arizona has contended that services have been properly rendered and the costs should be allowed. However, the University of Arizona has not performed any review of the documents supporting the amount claimed. Without adequate source documentation, we could not determine whether the costs claimed by CUB are allowable, allocable, reasonable, and properly documented as required by NSF regulations and OMB Circulars. As a result, we have questioned all costs claimed by CUB, \$17,999.

UNIVERSITY OF ARIZONA

National Science Foundation Award Number EAR - 9876800
 Schedule of Questioned Costs
 From January 1, 2000 to September 30, 2004

(Continued)

Note B-4 **Subaward Costs, (Continued)**

Awardee's Response

University of California, Los Angeles (UCLA)

The University of Arizona does not concur with the questioned amount of \$909. Additional supporting documentation was submitted with the response and the University of Arizona believes the revised questioned costs should be \$286.

University of California, Riverside (UCR)

The University of Arizona does not concur with the questioned amount of \$843. Additional supporting documentation was submitted with the response and the University of Arizona believes no costs should be questioned.

Columbia University - Biosphere (CUB)

The University of Arizona (Arizona) does not concur with the questioned amount of \$17,999. CUB did not provide supporting documentation due to a lawsuit between Columbia University and BioSphere2, which is beyond the control of Arizona. Additional support was submitted with the response to documents the research conducted by CUB and a certification from the principal investigator indicating the services provided by CUB was satisfactory.

Auditor's Response

University of California, Los Angeles (UCLA)

We have reviewed the additional submitted documentation and have revised our questioned costs accordingly. The remaining costs have been questioned because of the lack of any supporting documentation.

University of California, Riverside (UCR)

We have reviewed the additional submitted documentation and are still unable to determine how questioned costs of \$843 are supported by the submitted documentation. The first documentation was an e-mail to indicate travel expense of \$665, but there were no receipts to support the costs. The second documentation was a travel expense form for a total of \$1,639 with the associate receipts. However, there was no reconciliation or allocation methodology to determine how it relates to the questioned costs of \$843. Therefore, questioned costs remain unchanged for UCR.

Columbia University - Biosphere (CUB)

We have reviewed the additional documentation submitted and will still continue to question the costs associated with CUB. The basis of the finding is the lack of accounting records and source documentation to support the costs claimed by CUB and not on the basis of whether CUB provided the services. Without accounting records or source documentation to support the costs claimed, it could not be determined if the costs were accurate, allocable, and allowable per the NSF grant award. Therefore, questioned costs remain unchanged for CUB.

UNIVERSITY OF ARIZONA

National Science Foundation Award Number EAR - 9876800
 Schedule of Questioned Costs
 From January 1, 2000 to September 30, 2004

(Continued)

Note B-5 **Indirect Costs**

As a result of costs questioned in Notes B-1, B-2, B-3 and B-7, we have also questioned indirect cost claimed by the University as follows:

	Questioned Costs
Note B-1 – Questioned Salary & Wage	\$ 16,011
Note B-2 – Questioned Fringe Benefits	2,936
Note B-3 – Questioned Consulting Costs	2,516
Note B-7 – Questioned Publication Costs	<u>310</u>
Total Questioned Direct Costs	\$ 21,773
University of Arizona's Indirect Cost rate	<u>51.50%</u>
Questioned Indirect Costs	<u>\$ 11,213</u>

Awardee's Response

The University did not concur with the amount questioned in Notes B-1, B-2, B-3, and B-7. As such, the University does not concur with the amount questioned as indirect costs. Based on the University's calculation, questioned indirect costs should be \$3,320.

Auditor's Response

Based on our review of the University's response to Notes B-1, B-2, B-3, and B-7, questioned costs remained unchanged. As such, the corresponding indirect costs also remain unchanged.

Note B-6 **Cost Share**

As of August 31, 2004, the University certified total cost share expenditures as \$6,658,098. According to records maintained by the University, approximately \$1 million of the claimed cost share expenditures were contributed from subawardees. The University does not require the subawards to submit detail ledgers or other source documents to support the cost share amount claimed. During our audit, we requested each subaward to submit detail ledgers or transaction reports to support the amount claimed. From submitted detail ledgers, we reconciled the total amounts to the amounts reported by the University. Once reconciled, we selected a sample of transactions and requested the Subawardees to submit the source documents for review. After reviewing the submitted documentation, we noted that some of the costs were either inadequately supported or the subawardees provided no documentation to support the claimed costs. As a result, we have questioned \$335,187 of cost share claimed by subawards as follows: (See Finding and Recommendation No. 1 in the *Report on Compliance and Other Matters and Internal Controls over Financial Reporting*.)

UNIVERSITY OF ARIZONA

National Science Foundation Award Number EAR - 9876800
 Schedule of Questioned Costs
 From January 1, 2000 to September 30, 2004

(Continued)

Note B-6 **Cost Share, (Continued)**

<u>Subawardee</u>	<u>Questioned Cost Share</u>
Arizona State University	\$ 1,160
New Mexico Institute for Mining	118,207
Pennsylvania State University	139,327
University of California, Riverside	66,448
University of New Mexico	<u>10,045</u>
Total	<u>\$ 335,187</u>

Arizona State University (ASU)

Per the University of Arizona's detail records, ASU contributed a total of \$25,475 to cost share. Detail records, obtained from ASU, indicated ASU incurred more than \$25,475 of cost share expenditures. However, only \$24,315 was substantiated with adequate source documentation. The remaining amount of \$1,160 was not adequately supported with documentation. As a result, we have questioned \$1,160 of cost share claimed by ASU.

New Mexico Institute for Mining & Technology (NMT)

Per the University of Arizona's detail records, NMT contributed a total of \$559,615 to cost share. However, based on our review of NMT's general ledgers, our review of source documents, and discussions with NMT accounting personnel, total cost share incurred by NMT was \$441,408. NMT provided no additional documentation to support the difference of \$118,207. As a result, we have questioned \$118,207 of cost share claimed by NMT.

Pennsylvania State University (Penn)

Per the University of Arizona's detail records, Penn contributed a total of \$139,327 to cost share. We requested that Penn submit detail ledgers or transaction detail reports to support the amounts claimed. Our intention was to reconcile the ledger or report to the amount reported by the University and select a sample of transactions for review. However, Penn did not provide any documentation to support cost share expenditures. Penn has indicated that any review of costs incurred for the NSF award should be performed at Penn. However, Penn was willing to and did provide source documentation for costs claimed as NSF reimbursable during our review of subawardee costs. Without adequate documentation to support cost share amounts claimed, we could not determine whether the costs are allowable, allocable, reasonable, and properly documented as required by NSF regulations and OMB Circulars. As a result, we have questioned \$139,327 of cost share claimed by Penn.

UNIVERSITY OF ARIZONA

National Science Foundation Award Number EAR - 9876800
Schedule of Questioned Costs
From January 1, 2000 to September 30, 2004

(Continued)

Note B-6 **Cost Share, (Continued)****University of California, Riverside (UCR)**

Per the University of Arizona's detail records, UCR contributed a total of \$66,448 to cost share. A detail listing of cost share expenditures provided by UCR indicated cost share expenditure to be \$39,037. We then selected a sample of transactions from the detail listing for further review, but UCR did not provide any source documentation to support the selected transactions. However, UCR was willing to and did provide source documentation for costs claimed as NSF reimbursable during our review of subawardee costs. UCR provided no explanation as to why documentation was not provided. Without adequate documentation to support cost share amounts claimed, we could not determine whether the costs are allowable, allocable, reasonable, and properly documented as required by NSF regulations and OMB Circulars. As a result, we questioned \$66,448 of cost share claimed by UCR.

University of New Mexico (UNM)

Per the University of Arizona's detail records, UNM contributed a total of \$120,779 to cost share. UNM submitted detailed payroll records totaling \$110,734 to support the total costs claimed as cost share. However, UNM provided no additional documentation or explanation to support the difference of \$10,045. Without adequate documentation to support cost share amounts claimed, we could not determine whether the costs are allowable, allocable, reasonable, and properly documented as required by NSF regulations and OMB Circulars. As a result, we questioned \$10,045 of cost share claimed by UNM.

Awardee's Response

The University concurs that a discrepancy existed between the cost sharing number reported by the University through the NSF FastLane and the cost sharing numbers recognized in the subawardee's accounting systems. The University did not examine the detail cost sharing supporting documentation submitted by the subawardees during the audit and therefore are unable to verify the calculation of \$335,187.

To correct the cost sharing amount reported, the University has requested subawardees to report and certify their cost sharing numbers for the period of October 31, 2004. The review total cost sharing amount of \$6,355,408 was reported to NSF on August 24, 2005.

Auditor's Response

Notwithstanding the awardee's comments, questioned costs remain unchanged.

UNIVERSITY OF ARIZONA

National Science Foundation Award Number EAR - 9876800
 Schedule of Questioned Costs
 From January 1, 2000 to September 30, 2004

(Continued)

Note B-7

Publication Costs

We selected a random sample of four transactions, totaling \$21,728, for review. Our review indicated three transactions that were billed from the University's central print shop. Additional documents indicated the print shop contracted with a third party vendor to perform the required services. The third party vendor gave the University a 2% discount for the services, but the University charged the full invoice amount to the NSF award. The University has indicated the 2% difference is a recovery of the print shop's overhead. The University's Cost Accounting Standards Board Disclosure Statement reveals that University print shop is funded through user fees that are based on a combination of historical and projected costs. The University provided no additional documentation to indicate whether the 2% discount on third-party vendor invoices was properly determined based on the cost accounting standards for the print shop. As a result, we questioned \$310 of publication costs as follows: (See Finding and Recommendation No. 5 in the *Report on Compliance and Other Matters and Internal Controls over Financial Reporting*.)

<u>Transaction Date</u>	<u>University Document Number</u>	<u>Questioned Costs</u>
09/12/03	I467515	\$ 104
11/14/03	I474138	102
01/09/04	I480541	<u>104</u>
	Total	<u>\$ 310</u>

Awardee's Response

The University does not concur with the questioned costs as the 2% discount received from the third party vendor was pass on the NSF award. Additional documentation has been submitted.

Auditor's Response

We have reviewed the submitted documentation and acknowledge that the P&G is a service unit within the University. However, from the documentation submitted, it is not clearly documented how the 2% calculation covers P&G operation costs. Specifically, the University's Printing & Graphic Services states it manages the print program and "charges a 2% administrative fee for these services." The University submitted a trial balance of P&G costs for fiscal year end 2005, however, it was still unclear how the University calculated the 2% charge. As such, we are unable to determine if 2% is an equitable assessment. Therefore, the finding and recommendation remain unchanged.

UNIVERSITY OF ARIZONA
 Summary Schedules of Awards Audited and Audit Results
 From January 1, 2000 to September 30, 2004

Summary of Awards Audited

<u>Award Number</u>	<u>Award Period</u>	<u>Audit Period</u>
EAR – 9876800	01/01/00 – 12/31/04	01/01/00 – 09/30/04

<u>Award Number</u>	<u>Type of Award</u>	<u>Award Description</u>
EAR – 9876800	Grant	Research and education of students to build an interdisciplinary perspective and technological skills within professionals practicing water resources management.

Summary of Questioned and Unsupported Costs by Award

<u>Award Number</u>	<u>Award Budget</u>	<u>Claimed Costs</u>	<u>Questioned Costs</u>
EAR – 9876800	\$ 16,992,249	\$ 14,169,314	\$ 387,924

Summary of Questioned Cost by Explanation

<u>Category</u>	<u>Questioned Costs</u>	<u>Internal Controls</u>	<u>Non-Compliance</u>
Salaries and Wages	\$ 16,011	Yes	Yes
Fringe Benefits	2,936	Yes	Yes
Equipment	-	Yes	No
Travel	-	No	No
Participant Support	-	No	No
Material & Supplies	-	Yes	No
Publication	-	Yes	Yes
Consulting	2,516	Yes	Yes
Subcontractors	19,751	Yes	Yes
Other Direct Costs	-	No	No
Indirect Costs	11,213	Yes	Yes
Cost Sharing	335,187	Yes	Yes

Summary of Non-Compliance and Internal Control Findings

<u>Findings</u>	<u>Non-Compliance or Internal Control?</u>	<u>Material or Reportable?</u>
Subaward Monitoring	Non-Compliance & Internal Control	Reportable
Cost Sharing	Non-Compliance & Internal Control	Reportable
Electronic Payment Approval	Internal Control	Reportable
Consulting Costs	Internal Control	Reportable
Indirect Costs	Internal Control	Reportable
Payroll Expense	Internal Control	Reportable
Publication Costs	Internal Control	Reportable

UNIVERSITY OF ARIZONA
Notes to Financial Schedules
From January 1, 2000 to September 30, 2004

Note 1: Summary of Significant Accounting Policies

Accounting Basis

The accompanying financial schedule has been prepared in conformity with National Science Foundation (NSF) instructions. Schedule A has been prepared from the reports submitted to NSF. The basis of accounting utilized in preparation of these reports differs from generally accepted accounting principles. The following information summarizes these differences:

A. Equity

Under the terms of the award, all funds not expended according to the award agreement and budget at the end of the award period are to be returned to NSF. Therefore, the awardee does not maintain any equity in the award and any excess cash received from NSF over final expenditures is due back to NSF.

B. Equipment

Equipment is charged to expense in the period during which it is purchased instead of being recognized as an asset and depreciated over its useful life. As a result, the expenses reflected in the statement of award costs include the cost of equipment purchased during the period rather than a provision for depreciation.

The equipment acquired is owned by the University of Arizona while used in the program for which it was purchased or in other future authorized programs. However, NSF has the reversionary interest in the equipment. Its disposition, as well as the ownership of any proceeds there from, is subject to Federal regulations.

C. Inventory

Minor materials and supplies are charged to expense during the period of purchase. As a result, no inventory is recognized for these items in the financial schedules.

The departure from generally accepted accounting principles allows NSF to properly monitor and track actual expenditures incurred by the Grantee. The departure does not constitute a material weakness in internal controls.

Note 2: NSF Cost Sharing and Matching

The following represents the cost share requirement and actual cost share as of September 30, 2004:

<u>Award Number</u>	<u>Cost Share Required</u>	<u>Actual Cost Share Provided (A)</u>	<u>Over/(Under)</u>
EAR – 9876800	\$ 6,691,853	\$ 6,322,911	\$ (368,942)

(A) – Actual cost share provided reflects amount reported net of any questioned costs noted in Schedule A.

Note 3: Indirect Cost Rates

<u>Award Number</u>	<u>Indirect Cost Rate</u>	<u>Base</u>
EAR-9876800	51.50%	Modified Total Direct Costs (Total direct salaries, fringe benefits, materials, supplies, services, travel, and subawards (up to the first \$25,000))

APPENDIX - AUDITEE'S COMMENTS TO REPORT

Response to Audit Results

Compliance and Internal Control Issues

Inadequate Subawardee Monitoring

We concur. The University of Arizona (the University) will develop and implement written policies and procedures to assess and document each subawardee's risk of claiming non-allocable or non-allowable costs, including cost sharing expenditures. The responsible departments within the University will be advised for appropriate monitoring activities according to the risk levels of subawardees.

We expect to complete the development of written policies and procedures by June 30, 2006. A copy of the new policies and procedures will be provided to the Office of Inspector General at National Science Foundation (NSF) for review. We anticipate that the implementation of the new policies and procedures start on July 1, 2006.

Inadequate Retention of Electronic Payment Approvals

We do not concur that the University's electronic payment approvals were inadequately retained. The University's on-line Department Purchase Requisitions (DPR) System does retain payment approval signatures. DPR records are retained electronically in perpetuity via magnetic tape.

Copies of the archived DPR records supporting the transactions in question were submitted to the Conrad and Associates, L.L.P. auditor, Tom Huey, on November 21, 2005. See Attachment I for a copy of the documentation submitted.

Federal regulations require grants related records be kept for three years from the date of the submission of the final financial report. Because the DPR record retention period is longer than what is required by federal regulations and NSF award terms and conditions, the University is in compliance with NSF regulations and OMB circulars.

Inadequate Review of Consulting Expenditures

We concur with the recommendation that the University should institute a formal policy to require principal investigators or appropriate individuals on the research team to approve consulting services received before payment is processed.



As stated in the draft audit report, the SAHRA center has implemented a formal approval process for consulting expenditures since January 1, 2005. The business manager at the SAHRA center will obtain formal approval from either the principal investigator (PI) or research team leaders before any payment to consultants is processed.

The University is in the process of formalizing this practice into a written policy in the following university policy manuals:

- Handbook for Principal Investigators, under section for Post Award, Other Operating Costs

The Handbook for PIs informs the PIs the award process and guidelines for their fiscal and technical responsibilities.

- Financial Records System (FRS) Departmental Manual, Section 9.10, Requisition/Reimbursement

The FRS Departmental Manual is the authoritative source of policies, procedures, forms and reports used by the University departments in carrying out their functions related to the administration of overall financial matters.

Inadequate Documentation of Payroll Expenses

We concur with the recommendation that timesheets should be properly filed and maintained at the SAHRA center. However, we do not concur that all 18 transactions should be questioned. We maintain that the 6 transactions, 4 related to the salaries to academic personnel and 2 removed from the grant, should not be questioned.

We do not concur with the statement that the University has no signed certification of the employee's effort. The University's payroll time roster is the official record of employees' effort. Timesheets are subsidiary records for all wage employees. Although the University does not require timesheets for academic personnel, the payroll time roster is verified and certified electronically on a biweekly basis by the department authorized official for all employees. The University policy requires the department authorized official who approves the biweekly payroll time roster have either first-hand knowledge or a suitable means of verification of the work performed for all the employees appearing on the time roster. In the past, the SAHRA center's business manager verified the work performed through daily communication and budget reviews with the PI. Starting from January 1, 2006, the business manager has taken an additional step to require the PI approve and certify the work performed by all employees on the grant on a quarterly basis. PI's approval serves as additional subsidiary records for the payroll time roster. Copies of the roster, which document the percentage of effort on the project for all employees, were submitted for audit as part of the supporting documentation. Therefore,

we believe that the 4 transactions associated with employees with academic appointments should not be questioned.

In addition, we believe that the 2 transactions which were transferred out of the grant in October 2004 should not be questioned. These two transactions were posting errors and were removed from the grant when the errors were detected. Although the correction was not made within the audited period, it was made before the audit field work started.

As a result, we do not concur with the amount of the total cost questioned. We calculate the total costs of the 12 unsupported payroll transactions as follows:

Index	Employee Name	Salaries & Wages	Fringe Benefits	Indirect Costs	Total Costs	Earn Date	Check Date
1	[REDACTED]	\$ 554	\$ 105	\$ 339	\$ 999	6/24/2001	6/29/2001
2	[REDACTED]	138	26	85	250	6/24/2001	6/29/2001
3	[REDACTED]	100	2	52	154	6/30/2001	7/13/2001
4	[REDACTED]	39	1	20	60	6/23/2002	6/28/2002
5	[REDACTED]	641	26	343	1,010	6/23/2002	6/28/2002
6	[REDACTED]	605	122	374	1,100	6/30/2002	7/12/2002
7	[REDACTED]	466	15	247	728	6/30/2003	7/11/2003
8	[REDACTED]	310	45	183	538	7/6/2003	7/11/2003
9	[REDACTED]	776	113	458	1,346	7/20/2003	7/25/2003
10	[REDACTED]	776	113	458	1,346	8/3/2003	8/8/2003
11	[REDACTED]	776	113	458	1,346	6/6/2004	6/11/2004
12	[REDACTED]	512	74	302	889	6/6/2004	6/11/2004
Total		\$ 5,693	\$ 753	\$ 3,320	\$ 9,765		

To ensure proper filing of timesheets, the SAHRA center has strengthened its internal control over payroll transactions since January 1, 2005. Each month, the accountant will review payroll details and remove erroneous postings promptly. Formal policy has been adopted to require paper timesheets or electronic timesheets for all employees including off-site employees and employees whose timesheets are maintained in other University departments.

Overcharging of Publication Costs

We do not concur. The University did pass the 2% discount for publication costs to the NSF award.

The University Printing and Graphic Services (P&Gs) processes printing orders for the University departments. Printing contractors bill P&Gs and P&Gs then bills the respective department. However, P&Gs adds a 2% handling charge to recover applicable

internal service center coordination/processing costs. Such costs are not included in the University's Facilities & Administrative (F&A) Rates.

P&Gs operates as an internal service center unit for the University. Its billing rates are designed to recover current operating costs, equipment depreciation, and buildings and improvements use allowance. The billing rate set by P&Gs to process printing orders for fiscal year 2004 and 2005 was 2%. We have submitted supporting documentation which shows that P&Gs operates on a cost basis. See Attachment II for a copy of the documentation submitted to [REDACTED] on October 20, 2005.

Thus, we do not concur with the finding that the University retained the 2% discount as revenue to help offset its overhead costs. Our associate comptroller, who is responsible in developing the indirect cost rate at the University, discussed this finding with the HHS representative mentioned in the audit report. The HHS representative agrees that P&Gs is a service unit and its operating costs are not factored into the University's F&A rates. Therefore, the revenue collected by P&Gs did not offset the University's overhead costs.

Questioned Costs

Salaries & Wages (Schedule B, Note B-1): \$16,011

Because we concur that 12 instead of 18 timesheets were misfiled, we do not concur with the amount of the salaries and wages questioned. See our response to the finding titled Inadequate Documentation of Payroll Expenses. We calculate the costs of unsupported salaries and wages as follows:

Index	Employee Name	Salaries & Wages
1	[REDACTED]	\$554
2	[REDACTED]	138
3	[REDACTED]	100
4	[REDACTED]	39
5	[REDACTED]	641
6	[REDACTED]	605
7	[REDACTED]	466
8	[REDACTED]	310
9	[REDACTED]	776
10	[REDACTED]	776
11	[REDACTED]	776
12	[REDACTED]	512
Total		\$ 5,693

Fringe Benefits (Schedule B, Note B-2): \$2,936

Because we do not concur with the amount of the salaries and wages questioned, we calculate the costs of fringe benefits associated with the unsupported salaries and wages as follows:

Index	Employee Name	Fringe Benefits
1	[REDACTED]	\$ 105
2	[REDACTED]	26
3	[REDACTED]	2
4	[REDACTED]	1
5	[REDACTED]	26
6	[REDACTED]	122
7	[REDACTED]	15
8	[REDACTED]	45
9	[REDACTED]	113
10	[REDACTED]	113
11	[REDACTED]	113
12	[REDACTED]	74
Total		\$ 753

Consulting Costs (Schedule B, Note B-3): \$2,516

We concur that the consulting costs of \$2,516 should not have been charged to the grant. As stated in the draft audit report, the University has removed the consulting costs of \$2,516 and associated indirect costs from the NSF grant in February 2005.

In addition, the SAHRA center has implemented a formal approval process for consulting expenditures since January 1, 2005. See our response to the finding titled Inadequate Review of Consulting Expenditures. This new practice should eliminate wrong charges of consulting costs to the grant.

Subaward Costs (Schedule B, Note B-4): \$37,003

University of California, Los Angeles (UCLA): \$18,161

We do not concur with the amount of the questioned costs. UCLA has submitted additional supporting documentation in October 05. The University has forwarded the documentation to Mr. Huey, on October 4, 2005 and October 18, 2005. On May 19, 2006, UCLA submitted additional documentation to the University. See Attachment III

for a copy of the documentation submitted during the audit and the additional documentation submitted by UCLA.

As of May 23, 2006, UCLA has not submitted and is searching for supporting documentation for the following transactions:

Invoice No.	Transaction Date	Trans Reference	Amount
8	5/1/2003	17792	\$ 78.64
8	7/7/2003	18659	(1.00)
8	7/31/2004	Unknown	8.02
8	12/31/2002	0135TDB376	200.18
Total			\$ 285.84

If UCLA cannot provide further documentation to support these transactions, the University will request UCLA remove the charges and refund the University. Any refund will be credited to the grant, which will reduce the current reimbursement from NSF.

University of California, Riverside (UCR): \$843

We do not concur. The travel costs of \$843 claimed by UCR were adequately supported and thus should not be questioned. UCR submitted additional supporting documentation to the University on May 19, 2006. See Attachment IV for additional invoices, receipts, and transfer justification from UCR.

Columbia University – BioSphere2 (CUB): \$17,999

We do not concur. We believe that the costs of \$17,999 should not be questioned.

Columbia University did not provide supporting documentation due to the lawsuit between Columbia University and BioSphere2. The situation, however, is beyond the control of the University. The University has submitted documentation which presents the research conducted by BioSphere2 and acknowledges the completion of the services. [REDACTED] who is the associate director for education at SAHRA, prepared the submitted documentation and confirmed that the services provided by BioSphere2 were satisfactory. See Attachment V for a copy of the submitted documentation.

Indirect Costs (Schedule B, Note B-5): \$11,213

We do not concur with the amount of the indirect costs questioned. According to our response to the direct costs questioned, we calculate the related indirect costs as follows:

Salaries and Wages	\$ 5,693
Associated Fringe Benefit	753
Total Director Costs	6,446
Indirect cost rate on the grant	51.50%
Indirect costs	\$ 3,320

Cost Share (Schedule B, Note B-6): \$335,187

We concur that discrepancy existed between the cost sharing number reported by the University through the NSF FastLane and the cost sharing numbers recognized in the subawardees' accounting systems. We did not examine the detail cost sharing supporting documentation submitted by the subawardees during the audit; therefore, we are not able to verify the calculation of \$335,187.

To correct the cost sharing amount reported, the University has requested subawardees to report and certify their cost sharing numbers for the period of October 1, 1999 to October 31, 2004. The revised total cost sharing amount of \$6,355,408 was reported to NSF on August 24, 2005.

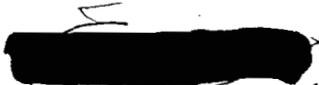
Publication Costs (Schedule B, Note B-7): \$310

We do not concur. Because the University did pass the 2% discount received from the third party vendor to the NSF award, we believe that the publication costs of \$310 should not be questioned. See our response to the finding titled Overcharging of Publication Costs.

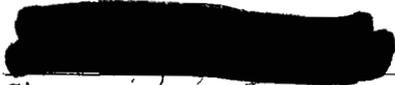

Comptroller, Financial Services Office


Signature


Date



Director, Sponsored Projects Services



Signature

5/24/06
Date

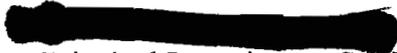


Contract Officer, Office of Research and Contract Analysis



Signature

5/24/06
Date



Principal Investigator, SAHRA Center



Signature

5/24/06
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Enclosure

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